No. 8300115

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pioneer Hi-Bred International, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT ETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT T. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN

'G39'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 25th *day of* July *in the year of our Lord one thousand nine hundred and* eighty-four.

Attest:

Kenneth A. [illegible]

Commissioner

Plant Variety Protection Office

Livestock, Meat, Grain & Seed D[illegible]

Agricultural Marketing Service

John R Block

Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

FORM APPROVED: OMB NO.0581-0055

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1. NAME OF APPLICANT(S)
Pioneer Hi-Bred International, Inc.

2. TEMPORARY DESIGNATION

3. VARIETY NAME
~~AD38~~ G39 RFS 8/9/84

4. ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*
Plant Breeding Division
Department of Corn Breeding
P. O. Box 85
Johnston, IA 50131-0085

5. PHONE *(Include area code)*
515/270-3300

FOR OFFICIAL USE ONLY

PVPO NUMBER
8300115

6. GENUS AND SPECIES NAME
Zea mays

7. FAMILY NAME *(Botanical)*
Gramineae

FILING
DATE 4/28/83
TIME 2:00 ☐ A.M. ☒ P.M.

8. KIND NAME
Corn

9. DATE OF DETERMINATION
1977

FEES RECEIVED
AMOUNT FOR FILING
$ 1,000
DATE 4/28/83
AMOUNT FOR CERTIFICATE
$500.00
DATE 6/22/84

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION *(Corporation, partnership, association, etc.)*
Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
Iowa

12. DATE OF INCORPORATION
May 6, 1926

13. NAME AND ADDRESS OF APPLICANT REPRESENATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
Dr. Richard L. McConnell
Plant Breeding Division
Pioneer Hi-Bred International, Inc.
P. O. Box 85
Johnston, IA 50131-0085

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

a. ☒ Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*

b. ☒ Exhibit B, Novelty Statement

c. ☒ Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*

d. ☒ Exhibit D, Additional Description of the Variety

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act.)*
☐ Yes *(If "Yes," answer items 16 and 17 below)* ☒ No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ Yes ☐ No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ Foundation ☐ Registered ☐ Certified

18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S. OR OTHER COUNTRIES?
☐ Yes *(If "Yes," give names of countries and dates)*
☒ No

19. HAVE RIGHTS BEEN GRANTED IN THE U.S. OR OTHER COUNTRIES?
☐ Yes *(If "Yes," give names of countries and dates)*
☒ No

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT
Pioneer Hi-Bred International, Inc.
by Richard L McConnell

DATE
4-20-83

SIGNATURE OF APPLICANT

DATE

FORM LMGS-470 (9-81) (Edition of 1-78 is obsolete)

C O R N

'~~AD38~~' 'G39'

NOTE: 'AD38' IS VARIETY 'G39' THROUGHOUT THIS APPLICATION. RJS 8/9/84

14A. Exhibit A. Origin and Breeding History

Pedigree: A33GB4/A34CB4)X312XE

Pioneer line '~~AD38~~' 'G39', Zea mays, a yellow dent corn inbred, was developed by Pioneer Hi-Bred International, Inc. from the F2 population of the single cross A33GB4 x A34CB4. The progenitors of AD38 are also proprietary inbred lines of Pioneer Hi-Bred International, Inc. The pedigree method of breeding was used in the development of this inbred as per the following.

F2 seed was obtained in the field at Tipton, Indiana, in 1973 by selfing the F1 hybrid A33GB4 x A34CB4. During the winter of 1973-74, the F2 population was grown at Homestead, Florida, and selected plants were self-pollinated. Five ears were saved from the F2 population and were grown ear to row in the field at Tipton, Indiana, during the summer of 1974. Three selfed ears from ear-row No. 3 were saved from the F3 population. The F4 family was grown at Tipton, Indiana, in 1975 at a high plant density of 45,000 plants per acre. Three ears were selfed and selected from the F4 ear-row No. 1 based on that row's excellent per se ear size, stalk quality, and plant health. In addition, the F4 was crossed to two inbred tester lines for the purpose of yield testing in 1976 to give an estimate of the line's general combining ability. In 1976, the F5 generation was grown at Tipton, Indiana, at a more normal plant population of 30,000 plants per acre and self-pollinated to produce F6 seed. Yield trials were also conducted at Tipton, Indiana, involving the test crosses made in 1975 to the F4. Based on yield test performance and nursery observations, the line was determined to possess some superior qualities relative to other inbreds evaluated and four ears were saved from ear No. 2 in the F5 generation. These ears were bulked and grown in Hawaii during the winter of 1976/77 and again during the summer of 1977 at Tipton, Indiana, to make hand-pollinated increases of the breeder's seed for use in making hybrid seed. The line was evaluated in subsequent generations for uniformity by growing the hand-pollinated increase ear to row and observing for variant plants. The line was named 'G39' '~~AD38~~' in January 1977 and additional hybrid combinations were made and evaluated. An outline of the breeding profile of the inbred is attached.

G39
~~AD38~~ has shown uniformity and stability for all traits as described in Exhibit C (form LPGS-470-28) - "Objective Description of Variety." It has been self-pollinated and ear-rowed a sufficient number of generations with careful attention paid to uniformity of plant type to assure genetic homozygosity and phenotypic stability. AD38 has been increased by the Parent Corn Department, Pioneer's foundation seed group, every year since 1980. The line has been increased both by hand and in isolated fields with continued observation for uniformity.

No variant traits have been observed or are expected in ~~AD38.~~ '639'.

Pioneer Hi-Bred International, Inc., Des Moines, Iowa, is the employer of the plant breeders involved in the selection and development of ~~AD38~~. Pioneer Hi-Bred International, Inc. has the sole rights and ownership of ~~AD38.~~ '639'.

14A. Exhibit A. Origin and Breeding History of ~~AB38~~ 'G39' R/S Corn Inbred Line

Season/Year	Inbreeding Level	Nursery Location	Pedigree	Number of Ears Saved
Summer 1972	F0	Princeton, IN	F1 cross made.	--
Summer 1973	F1	Tipton, IN	A33GB4/A34CB4	15
Winter 1973-74	F2	Homestead, FL	A33GB4/A34CB4)X	5
Summer 1974	F3	Tipton, IN	A33GB4/A34CB4)X3	3
Summer 1975	F4*	Tipton, IN	A33GB4/A34CB4)X31	3
Summer 1976	F5	Tipton, IN	A33GB4/A34CB4)X312	4
Winter 1976-77	F6**	Kauai, HI	A33GB4/A34CB4)X312XE	Bulk
January 1977	Line named ~~AB38~~ 'G39'			
1977-82	Line increased by hand-pollination and in isolated fields for use in hybrid seed production.			

*Testcross made for yield testing in 1976.
**More hybrid combinations made involving ~~AB38~~ 'G39'

14B. Exhibit B. Novelty Statement

'G39' is most similar to the inbred line B73 for plant stature and performance in hybrid combinations. As an inbred per se, ~~AD38~~ 'G39' differs from B73 in that it reaches 50% pollen shed and 50% silk 48 and 52 heat units, respectively, later than B73. AD38's silk color is green whereas the silk color for B73 is salmon. Cob color of AD38 is white; B73's cob color is red. Kernels of AD38 size out in the range of 20-40% rounds while B73 sizes less than 20% rounds.

B73 develops white aleurone when it is pollinated with a foreign source of pollen carrying the dominant C gene. AD38, however, carries the dominant R gene and develops a purple colored aleurone when it is pollinated with C gene pollen. When pollinated with non-C gene pollen, ~~AD38~~ "G39" develops white aleurone.

From the standpoint of performance in hybrid combinations, ~~AD38~~ 'G39' differs from B73 by expressing superior standability and better late season plant health.

NOTE: 'AD38' IS VARIETY 'G39' — RJS

FORM APPROVED: OMB NO. 40-R3822

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Corn)

OBJECTIVE DESCRIPTION OF VARIETY
CORN *(ZEA MAYS)*

NAME OF APPLICANT(S)
Pioneer Hi-Bred International, Inc.

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
Plant Breeding Division
Department of Corn Breeding
P. O. Box 85
Johnston, IA 50131-0085

FOR OFFICIAL USE ONLY
PVPO NUMBER 8300115
VARIETY NAME OR TEMPORARY DESIGNATION ~~AD38~~ t G39 RyS

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. 0 8 9 or 0 9) when number is either 99 or less or 9 or less.

1. TYPE:

[2] 1 = SWEET 2 = DENT 3 = FLINT 4 = FLOUR 5 = POP 6 = ORNAMENTAL

2. REGION WHERE BEST ADAPTED IN THE U.S.A.:

[7] 1 = NORTHWEST 2 = NORTHCENTRAL 3 = NORTHEAST 4 = SOUTHEAST
5 = SOUTHCENTRAL 6 = SOUTHWEST 7 = MOST REGIONS

3. MATURITY (In Region of Best Adaptability): *(Under "comments" (pg. 3) state how heat units were calculated)*

[7 9]	DAYS FROM EMERGENCE TO 50% OF PLANTS IN SILK	[1 5 7 5] HEAT UNITS
[ ]	DAYS FROM 50% SILK TO OPTIMUM EDIBLE QUALITY	[ ] HEAT UNITS
[ ]	DAYS FROM 50% SILK TO HARVEST AT 25% KERNEL MOISTURE	[ ] HEAT UNITS

4. PLANT:

[2 5 3] CM. HEIGHT (To tassel tip) [0 9 6] CM. EAR HEIGHT (To base of top ear)

[0 6] CM. LENGTH OF TOP EAR INTERNODE

Number of Tillers:

[1] 1 = NONE 2 = 1–2 3 = 2–3 4 = > 3

Number of Ears Per Stalk:

[1] 1 = SINGLE 2 = SLIGHT TWO-EAR TENDENCY 3 = STRONG TWO-EAR TENDENCY 4 = THREE-EAR TENDENCY

Cytoplasm Type:

[1] 1 = NORMAL 2 = "T" 3 = "S" 4 = "C" 5 = OTHER (Specify) _____

5. LEAF (Field Corn Inbred Examples Given):

Color:

[3] 1 = LIGHT GREEN (HY) 2 = MEDIUM GREEN (WF9) 3 = DARK GREEN (B14) 4 = VERY DARK GREEN (K166)
Observed Olive Green

Angle from Stalk (Upper half):

[1] 1 = < 30° 2 = 30–60° 3 = > 60°

Sheath Pubscence:

[1] 1 = LIGHT (W22) 2 = MEDIUM (WF9) 3 = HEAVY (OH26)

Marginal Waves:

[1] 1 = NONE (HY) 2 = FEW (WF9) 3 = MANY (OH7L)

Longitudinal Creases:

[2] 1 = ABSENT (OH51) 2 = FEW (OH56A) 3 = MANY (PA11)

Width:

[1 0] CM. WIDEST POINT OF EAR NODE LEAF

Length:

[0 9 1] CM. EAR NODE LEAF

[1 9] NUMBER OF LEAVES PER MATURE PLANT

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6. TASSEL:

[0][8] NUMBER OF LATERAL BRANCHES

Branch Angle from Central Spike:

[3] 1 = < 30° 2 = 30–40° 3 = > 45°

Peduncle Length:

[2][5] CM. FROM TOP LEAF TO BASAL BRANCHES

Pollen Shed:

[3] 1 = LIGHT (WF9) 2 = MEDIUM 3 = HEAVY(KY21)

[1] **Anther Color:** Observed greenish yellow, secondary
1 = YELLOW 2 = PINK 3 = RED 4 = PURPLE 5 = GREEN

[5] **Glume Color:** 6 = OTHER (Specify) _____
Observed pale yellow green, secondary

Pollen Restoration for Cytoplasms (o = Not Tested, 1 = Partial, 2 = Good)

[0] "T" [0] "S" [0] "C" [ ] OTHER (Specify Cytoplasm and degrees of restoration) _____

7. EAR (Husked Ear Data Except When Stated Otherwise):

[1][8] CM LENGTH [3][4] MM. MID-POINT DIAMETER [7][8] GM. WEIGHT

Kernel Rows:

[1] 1 = INDISTINCT 2 = DISTINCT [1][2] NUMBER

[ ] 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = SPIRAL

Silk Color (Exposed at Silking Stage):

[1] Observed pale greenish yellow
1 = GREEN 2 = PINK 3 = SALMON 4 = RED

Husk Color:

[2] FRESH Observed yellow green
1 = LIGHT GREEN 2 = DARK GREEN 3 = PINK

[6] DRY
4 = RED 5 = PURPLE 6 = BUFF
Observed pale brownish pink

Husk Extention: (Harvest Stage)

[3] 1 = SHORT (Ears Exposed) 2 = MEDIUM (Barely Covering Ear)
3 = LONG (8–10CM Beyond Ear Tip)
4 = VERY LONG (> 10 CM)

Husk Leaf:

[3] 1 = SHORT (< 8 CM) 2 = MEDIUM (8–15 CM)
3 = LONG (> 15 CM)

Shank:

[1][3] CM LONG [6] NO. OF INTERNODES

Position at Dry Husk Stage:

[1] 1 = UPRIGHT 2 = HORIZONTAL 3 = PENDENT

Taper:

[1] 1 = SLIGHT 2 = AVERAGE 3 = EXTREME

Drying Time (Unhusked Ear):

[ ] 1 = SLOW 2 = AVERAGE 3 = FAST

8. KERNEL (Dried):

Size (From Ear Mid-Point):

[0][9] MM LONG [0][8] MM. WIDE [0][7] MM. THICK

Shape Grade (% Rounds)

[2] 1 = < 20 2 = 20–40 3 = 40–60 4 = 60–80 5 = > 80

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8. KERNEL (Dried) :

[1] Observed translucent white
Pericarp Color: 1 = COLORLESS 2 = RED-WHITE CROWN 3 = TAN 4 = BRONZE 5 = BROWN 6 = LIGHT RED 7 = CHERRY RED 8 = VARIEGATED (Describe) _____

[1] **Aleurone Color:** 1 = HOMOZYGOUS 2 = SEGREGATING (Describe) _____

[1] Observed opaque white
1 = WHITE 2 = PINK 3 = TAN 4 = BROWN 5 = BRONZE 6 = RED 7 = PURPLE 8 = PALE PURPLE 9 = VARIEGATED (Describe) _____

[3] **Endosperm Color:** 1 = WHITE 2 = PALE YELLOW 3 = YELLOW 4 = PINK-ORANGE 5 = WHITE CAP.
Observed deep orange yellow

Endosperm Type:

[3] 1 = SWEET (su1) 2 = EXTRA SWEET (sh2) 3 = NORMAL STARCH 4 = HIGH AMYLOSE STARCH 5 = WAXY STARCH 6 = HIGH PROTEIN 7 = HIGH LYSINE 8 = OTHER (Specify) _____

[2][9] GM. WEIGHT /100 SEEDS (Unsized Sample)

9. COB:

[2][2] MM. DIAMETER AT MID-POINT

Strength:

[2] 1 = WEAK 2 = STRONG

Color:

[1] 1 = WHITE 2 = PINK 3 = RED 4 = BROWN 5 = VARIEGATED 6 OTHER (Specify) _____

10. DISEASE RESISTANCE (0 = Not Tested, 1 = Susceptible, 2 = ~~Resistant~~):

[2]	STALK ROT (Diplodia)	[2]	STALK ROT (Fusarium) Tolerant	[2]	STALK ROT (Gibberella)
[1]	NORTHERN LEAF BLIGHT	[2]	SOUTHERN LEAF BLIGHT	[2]	SMUT (Head Smut)
[1]	SOUTHERN RUST	[2]	CORN SMUT (Common)	[1]	BACTERIAL WILT (Stewart's)
[0]	BACTERIAL LEAF BLIGHT	[1]	MAIZE DWARF MOSAIC	[0]	STUNT
[ ]	OTHER (Specify)				

11. INSECT RESISTANCT (0 = Not Tested, 1 = Susceptible, 2 = Resistant):

[1]	CORNBORER (European)	[1]	EARWORM	[0]	SAPBEETLE	[1]	APHID
[0]	ROOTWORM (Northern)	[1]	ROOTWORM (Western)				
[0]	ROOTWORM (Southern)	[ ]	OTHER (Specify) _____				

12. VARIETIES MOST CLOSELY RESEMBLING THAT SUBMITTED FOR THE CHARACTERS GIVEN:

CHARACTER	VARIETY	CHARACTER	VARIETY
Maturity	B73	Kernel Type	B73
Plant Type	B73	Quality (Edible)	
Ear Type	B73	Usage	B73

REFERENCES:

U.S. Department Agriculture. Yearbook 1937.

Corn: Culture, Processing, Products. 1970 Avi Publishing Company, Westport, Connecticut. (Numerous (Authors)

Emerson, R.A., G.W. Beadle, and A.C. Fraser. A Summary of Linkage Studies in Maize.Cornell A.E.S., Mem. 180. 1935.

The Mutants of Maize. 1968. Crop Science Society of America. Madison, Wisconsin.

Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S. Bul. 831. 1959.

Butler, D.R. 1954 – A System for the Classification of Corn Inbred Lines – PhD. Thesis, Ohio State University.

COMMENTS: Heat units are accumulated from daily temperatures as follows:
HI = Maximum air temperature in Fahrenheit, but not greater than 86.
LO = Minimum air temperature in Fahrenheit, but not less than 50.
Heat Units = (HI + LO)/2 – 50, but not less than 0.

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14D. Exhibit D. Additional Description of ~~AD38~~ 'C-38'

'~~AD38~~' 'C-39' is a yellow dent inbred line of corn, Zea mays.

~~AD38~~ 'C-39' is similar to B73 in plant height (253 vs. 251 centimeters). AD38, however, is 14 centimeters lower eared (96 vs. 110). Both are single-eared inbreds with dark green leaves. AD38 and B73 are also similar in leaf angle (less than 30 degrees from the stalk), number of leaves per mature plant (19 vs. 18), width of ear node leaf (10 vs. 9 centimeters), and length of ear node leaf (91 vs. 98 centimeters).

~~AD38~~ 'C-39' has indistinct kernel rows while B73 has straight, distinct rows. Ear size of AD38 is 34 millimeters in diameter and 18 centimeters in length versus 46 millimeters and 15 centimeters for B73. When crossed to the same inbred tester lines and evaluated at the same locations, AD38 shows advantages over B73 by being 5% of the test mean drier (grain) at harvest, 4% less stalk breakage, 8% fewer root lodged plants, 24% better for stay green (late-season plant health), and 8% better for early-season seedling vigor (growth after emergence).

~~AD38~~ 'C-39' has shown above average tolerance to Southern corn leaf blight (Helminthosporium maydis), Helminthosporium leaf spot (Helminthosporium carbonum), and head smut (Sphacelotheca reiliana). It is below average for tolerance to the MDM-MCD virus complex of the Southeastern U. S., to Stewart's bacterial wilt (Erwinia stewartii), and to sorghum downy mildew (Sclerospora sorghi).

Hybrids involving AD38 in their parentage are characterized by having better than average dry-down at harvest time, excellent stalk quality, and outstanding late-season plant health. Grain quality and test weight of AD38 hybrids are also above average. AD38 per se, as well as in hybrid combinations, expresses above average early-season vigor. AD38 hybrids are average in plant height for their maturity. These hybrids are best adapted to the mid- to full-season areas of the Central and Southern Corn Belt.

NOTE: 'AD38' IS VARIETY 'C-38' — RJS.

14D. Exhibit D. Comparison of ~~AD38~~ 'G39' Pfs and B73 crossed to the same tester lines and the hybrids evaluated at the same locations. All values are expressed as percent of the test mean except yield, which is expressed as bushels/acre adjusted to 15.5% moisture.

	Inbred	Yield	Percent Yield	Moisture	GDU Shed	Stalk Lodging	Root Lodging	Ears/Plot	Stay Green	Test Weight	Grain Quality	Cob Scores	Seedling Vigor	Plant Height	Ear Height			
No. of Reps.		987	987	990	235	926	401	353	633	920	541	255	484	545	545			
	G39 ~~AD38~~	159	105	98	101	104	103	102	116	101	105	113	108	101	100			
	B73	159	104	103	100	100	95	100	92	101	103	92	100	102	104			
Diff.		0	1	-5	1	4	8	2	24	0	2	21	8	-1	-4			

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'E39' R/S

14D. Exhibit D. Additional Description of ~~AD38~~ Continued

a. Whole plant

14D. Exhibit D. Additional Description of ~~AD38~~ '639 Continued

b. Tassel

14D. Exhibit D. Additional Description of ~~AD38~~ 'C-39' Continued

c. Ear